## GRADUATE MAJOR CHANGE BULLETIN NO. 5

## **Fall 2016**

The courses listed below reflect the graduate major curricular changes approved by the Catalog Subcommittee and the Graduate Studies Committee since approval of the last Graduate Major Change Bulletin. All new and revised courses are printed in their entirety under the headings Proposed and Current, respectively. The column to the far right indicates the date each change becomes effective.

Subject	Course Number	New Revise	Current	Proposed	Effective Date
ED RES	576	New	N/A	Neurocognition Science Laboratory Rotation V 1 (0-3) to 3 (0-9) May be repeated for credit; cumulative maximum 3 hours. Hands on applications of principles and theory of psychophysiological assessment in a laboratory setting. Typically offered Fall and Spring.	8-17
GEOLOGY	541	Revise	Structural Analysis 3 (2-3) Structural analysis of complexly deformed rocks in orogenic belts. Field trip required. Cooperative: Open to UI degree-seeking students.	Orogenic Systems 3 Detailed analysis of the construction of mountain belts. Field trip required. Recommended preparation:  B.S. in geology or related field. Typically offered Fall. Cooperative: Open to UI degree-seeking students.	8-17
KINES	525	New	N/A	Aging Across the Lifespan 3 Course prerequisite: Admitted to any WSU graduate program. Examination of aspects of aging as a process across the lifespan including physical, mental, and emotional changes that occur throughout the process. Typically offered Fall.	8-18
KINES	561	New	N/A	Motor Control Theory 3 Course Prerequisite: Admitted to Kinesiology MS program. The mechanisms and principles governing motor control and learning, as well as the research methods commonly used in motor behavior. Typically offered Spring.	1-19
KINES	562	New	N/A	Biomechanical Measurement Techniques 3 Course Prerequisite: Admitted to Kinesiology MS program. The daily operational use and maintenance of biomechanics lab equipment; the processing and analysis of biomechanics lab data. Typically offered Spring.	8-18

MSE / ME	507	New	N/A	Additive Manufacturing 3 Additive manufacturing processes and their applications in ceramic, metallic, polymeric, and composite materials. Recommended preparation: Basic knowledge in materials science and manufacturing. (Crosslisted course offered as MSE 507, ME 507). Typically offered Odd Years - Spring. Cooperative: Open to UI degree-seeking students.	8-17
STAT	575	New	N/A	The Theory of Multivariate Analysis 3 Course Prerequisite: STAT 519; STAT 536; STAT 556. The theoretical development and application of multivariate statistical methods; topics include multivariate distributions, MANOVA, principal components, factor analysis and classification. Typically offered Spring.	8-17
STAT	576	New	N/A	Bayesian Analysis 3 Course Prerequisite: STAT 536; STAT 556. Statistical principle for combing new evidence with prior beliefs, inference and simulation procedures for accommodating complex data and producing interpretable output. Typically offered Spring.	8-17
STAT	577	New	N/A	Statistical Learning Theory 3 Focus on learning and interpreting from data; both prediction and classification will be discussed for supervised and unsupervised learning. Recommended preparation: STAT 533; STAT 536; STAT 556. Typically offered Fall.	8-17
TCH LRN	571	Revise	Elementary School Science 3 Theories and research underlying science programs with classroom implications.	Research in STEM Education 3 Contemporary issues in STEM education research and practice. Typically offered Odd Years - Spring.	1-17